



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : B29B 7/28, C08L 21/00, B60C 1/00		(11) International Publication Number: WO 00/59699
A1		(43) International Publication Date: 12 October 2000 (12.10.00)
(21) International Application Number: PCT/EP00/02665		(81) Designated States: BR, CN, ID, JP, KR, TR, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(22) International Filing Date: 27 March 2000 (27.03.00)		
(30) Priority Data: 99830189.9 1 April 1999 (01.04.99) EP 60/134,665 18 May 1999 (18.05.99) US		
(71) Applicant (for all designated States except US): PIRELLI PNEUMATICI S.P.A. [IT/IT]; Viale Sarca, 222, I-20126 Milano (IT).		
(72) Inventors; and (75) Inventors/Applicants (for US only): HOTELLIER, Gianluigi [IT/IT]; Via Bazzini, 24, I-20131 Milano (IT). PRONI, Antonio [IT/IT]; Via dei Platani, 45, I-26900 Lodi (IT).		
(74) Agent: GIANNESI, Pier, Giovanni; Pirelli S.p.A., Industrial Property Dept., I-20126 Milano (IT).		

(54) Title: PROCESS FOR PRODUCING A SILICA-REINFORCED RUBBER COMPOUND

(57) Abstract

In a process for manufacturing a tyre compound comprising a polymer base, silica and a silica-binding agent, in a batch mixing device, a blend comprising the materials mentioned is processed together with various ingredients, while continuously checking that the curves for the power supplied, the energy absorbed and the temperature inside the mixer are within a range of predetermined values, so as to avoid or at least substantially reduce the systematic checks on the final compound, preliminary to giving clearance for the reproduction of the product and the process. The process also involves controlling the power and temperature curves by means of adjusting the number of rotations of the rotors and the movements of a piston, which is included in the device, in one direction or in the opposite direction against the blend being processed, so as to keep the process parameters for the blend within defined ranges of values.

